

THE BLACK BEAR

PART ONE:

FIREARMS/AGENCY TRADE
ASSOCIATIONS

CLIENT RETENTION AND
RECRUITMENT

BLACK BEAR LOTTERIES



About the Writer

Susan Russell is former vice president for wildlife for Friends of Animals, Inc. and legislative advisor for the Animal Welfare Institute's Society for Animal Protective Legislation. Ms. Russell was campaign director and lobbyist for the New Jersey statute banning steel-jaw leghold traps and the state's Wild Bird Law. She has represented NGO organizations at CITES. She is wildlife policy specialist for the League of Humane Voters of New Jersey, the Animal Protection League of New Jersey, and the Bear Education And Resource Group.

Copyright © 2011 by Susan E. Russell

Acknowledgements: My appreciation to Angi Metler, founder and director of the Animal Protection League of New Jersey, for drawing on her institutional knowledge of New Jersey's black bear hunt controversy, and for her unwavering and selfless commitment to this remarkable animal.

Unless otherwise noted, photographs of New Jersey bears are by Susan Kehoe. Cover photo by Susan Kehoe.

Animal Protection League of New Jersey | PO Box 174 | Englishtown | NJ 07726 | (732) 446-6808 | www.aplnj.org
The BEAR Group | PO Box 918 | Hewitt | NJ 07421 | (973) 315-3219 | www.thebeargroup.org
League of Humane Voters of New Jersey | PO Box 17 | Manalapan | NJ 07726 | www.lohvnj.org

There are two American wildlife traditions. This report is dedicated to the memory of pioneer preservationists William Temple Hornaday, Rosalie Edge, and John Muir, whose contributions have been obscured, and exploited, by the "interlocking" forces — firearms manufacturers, allied conservationists, and game departments, they exposed and fought against.

Thirty Years War for Wildlife William Temple Hornaday, 1931

Rosalie Edge, Hawk of Mercy: The Activist Who Saved Nature from the Conservationists (Wormsloe Foundation Nature Book) Davana C. Furmansky

"The murder business and sport by saint and sinner alike has been pushed ruthlessly, merrily on, until at last protective measures are being called for, partly, I suppose, because the pleasure of killing is in danger of being lost from there being little or nothing left to kill, and partly, let us hope, from a dim glimmering recognition of the rights of animals and their kinship to ourselves."

John Muir, Letter to Henry Fairfield Osborn (16 Jul. 1904). In William Frederic Badè, The Life and Letters of John Muir.

TABLE OF CONTENTS

BLACK BEAR LOTTERIES: CLIENT RECRUITMENT AND RETENTION. 5

The partnership 5

R&R. 7

SECURING TRASH AND ATTRACTANTS 8

The only effective solution 8

Averting Bear Smart, at all costs. 10

Conflict: the baiting problem 10

MOTIVE MATTERS 11

MERCHANDISING THE BLACK BEAR 12

R&R STATE BLACK BEAR LOTTERIES AND HUNTS 12

The Nevada Lottery: first bear hunt in 151 years 13

The Maryland Lottery: first bear hunt in 51 years 13

Kentucky: first bear hunt in 100 years 15

California R&R Bear Hunt: GPS-collared dogs, raised kill limit 15

Oklahoma's First Bear Hunt: 2009 16

The New Jersey Black Bear Lotteries: 2003, 2005, 2010, 2011; “any gender, any age” 16

NJDFW Science and Non-lethal Efforts Questioned 17

World Class Bear Experts: NJDFW baseline population data exaggerated 18

After the fact, NJDFW changed pre-hunt female kill estimates 22

POLL TESTS 22

The Science of Poll Testing 22

Population Control 22

“Scientific” Solutions in Search of a Problem 24

PORTRAYING HUNTABLE WILDLIFE AS A LIABILITY 24

“Bears in the Backyard” 24

AUGEAN STABLES 26

SOURCES. 27

WE’RE ALL GAME MANAGERS NOW 29

A Word About Who Pays for Conservation. 33

BLACK BEAR LOTTERIES: CLIENT RECRUITMENT AND RETENTION

Figure 2.1

The Partnership

The Hunting Heritage Partnership is a program designed to build a strong partnership between the National Shooting Sports Foundation, Inc., the Congressional Sportsmen’s Foundation and state wildlife agencies by providing funding to state wildlife agencies to create greater hunting opportunities and put more hunters in the field.^[1]

*-The National Shooting Sports Foundation
[see Figures 2.1-2.2]*

The Industry/Agency Coalition

In 2010, the [ASSOCIATION OF FISH AND WILDLIFE AGENCIES] Industry/Agency Coalition launched its most exciting effort to date—the Council to Advance Hunting & the Shooting Sports. In September 2010, the Council held its inaugural meeting and seated a 23-member Board of Directors from top hunting and shooting-related NGOs and trade organizations and conservation leaders from state and federal agencies to formulate a national recruitment and retention strategy^[2] and methods of acquiring sustainable funding to drive such a strategy.

*-Association of Fish and Wildlife Agencies
[see Figure 3.1]*

The national agency charged with protecting public lands and wildlife is riddled with incompetence and corruption, captive to industries it is supposed to regulate and far more interested in exploiting public resources than conserving them... But the department’s failings go beyond that to its coziness with the industries it is sworn to regulate, its reckless assault on the country’s natural resources and its abuse of science.

-Fixing Interior, New York Times Dec. 16, 2008

The National Shooting Sports Foundation

“The National Shooting Sports Foundation is the trade association for the firearms industry.”^[1]

“Working with NSSF, states are reaping the rewards!”

Our job is to help wildlife agencies deliver real and measurable results. Our goal is tailored to your specific needs. HHP can help increase:

- Hunter access to public and private lands
- Incentives to keep current hunters hunting
- Recruitment of next generation hunters
- Programs that create more opportunities to hunt
- Communications programs geared toward recruiting and retaining hunters.

[1] National Shooting Sports Foundation, “About the National Shooting Sports Foundation,” <http://www.nssf.org/industry/aboutNSSF.cfm> (28 Nov 2011)

Figure 2.2

The National Sportsmen’ Caucus/Congressional Sportsmen’ Foundation serves “sportsmen and the outdoor industry... delivering returns on investments” for:

- National Rifle Association
- Archery Trade Association
- Titanium
- National Shooting Sports Foundation (“the firearms industry trade association”)
- Safari Club International
- Browning
- ATK Federal Premium^[1] (ammunition) among others

[1] <http://www.sportsmenslink.org/About-Us/CSF-Partners>



ASSOCIATION OF FISH AND WILDLIFE AGENCIES

AFWA is an umbrella association that commingles state wildlife agency regulators and the wildlife-use trade. Highlighted “wildlife organization” partners include: Archery Trade Association, Safari Club International (SCI has challenged the Endangered Species and Marine Mammal Protection Acts), Weatherby, and U.S. Sportsmen’s Alliance (retail, shooting, trappers and furriers).

Federal partners: USDA/APHIS, U.S. Geological Survey; National Park Service, U.S. Fish & Wildlife Service.

AFWA ASSOCIATE/CONTRIBUTING MEMBERS:

- The Wildlife Management Institute (See Figure 4.2)
- Archery Trade Association (ATA) Currently headed by “Muzzy Products – Bad to the Bone.” ATA board members “[w]ork[s] with the Association of Fish and Wildlife Agencies, which promotes hunting and bow hunting nationwide” (www.archerytrade.org May 21, 2010).
- Safari Club International First for Hunters (Sourcewatch: “An organization of trophy hunters”).
- U.S. Sportsmen’s Alliance Members include Flemington Furs, National Trappers’ Association.
- Ducks Unlimited Partners include Federal Premium Ammunition, Winchester Ammunition, Mossy Oak, and Budweiser.
- National Shooting Sports Foundation “The National Shooting Sports Foundation (NSSF) is the trade association for the firearms and recreational shooting sports industry.” NSSF Board of Governors: Remington Arms, Beretta USA, Smith & Wesson, Hornaday, Olin Corporation, RSR Group, Mossburg & Sons, Camfour, Glock, InterMedia Outdoors, Browning Arms Co, Leupold & Stevens, ATK Armament Systems, Taurus International Firearms, The Sportsman’s Shop, Colt’s Manufacturing (<http://www.nssf.org/industry/boardNSSF.cfm> May 19, 2010).
- The National Wild Turkey Federation Winchester Ammunition, Federal Premium Ammunition, Marksman, Browning, Precision Beeman Airguns, CASE, SARGE, Outdoor Underwriters Inc, McConnell Hall Outfitters, Leupold, Knight & Hale Game Calls, Gun Broker.com, Hevi-Shot, Foxy Huntress, among others.
- Delta Waterfowl Specializes in natural predator control.
- The Nature Conservancy (See three-part *Washington Post* series).

R&R

Inaugural black bear hunts, lotteries, and deregulation are stirring fierce controversy in New Jersey, Nevada, Maryland, California, Kentucky, and Oklahoma. No matter how low or tenuous the bear population (see Maryland, Nevada, Kentucky, Oklahoma), the *leitmotif* is “scientific population control,” thereby preventing nuisance incidents. Taking into account the species’ slow recovery from extirpations caused by hunting, burgeoning lotteries are not coincidental.

The purpose of each is hunter recruitment and retention (R&R), a project of unprecedented scope initiated by the National Shooting Sports Foundation (“NSSF, the trade association for the firearms and recreational shooting sports industry”) in concert with state and federal wildlife authorities.

The industry/agency coalition has prescribed “big game” (black bear) hunting lotteries as a marketing tool for the “crucial” recruitment new clients.

Participants include the Archery Trade Association, Safari Club International (trophy hunting), The Wildlife Management Institute (ATK Ammunition Systems, SigArms Corporation, Taurus International Firearms), and the Congressional Sportsmen’s Foundation (NSSF, Archery Trade Association, National Rifle Association) and federal, state and provincial wildlife departments in the United States and Canada. Safari Club International lists the “New Jersey Bear Hunt” as a priority, along with de-listing wolves and grizzly bears.^[3] [see Figure 4.2]

The aforementioned interests are represented by the Association of Fish and Wildlife Agencies (AFWA), the umbrella organization that commingles state wildlife regulators and all facets of the wildlife-use trade. Dave Chanda, director of the New Jersey Division of Fish and Wildlife, is an AFWA official, and, along with trade associations, sits on the hunter recruitment committee.

The overarching goal is to staunch a nationwide loss of hunter-clients, and to recruit new ones:

Hunting license sales don’t lie. Across the nation, fewer people are hunting. When adults don’t hunt, their kids don’t hunt. While a drop in license sales doesn’t tell the whole story, it flashes a warning.

“Best Practices for Hunting and Shooting Retention Workbook,” National Shooting Sports Foundation



Figure 4.2

“Away from the Limelight”

WILDLIFE MANAGEMENT INSTITUTE

WMI board of directors (2000): Remington Arms, Inc. Browning Arms, Inc.; Alliant Powder; Olin Corporation; Hodgdon Powder Com.; Blount, Inc.; Marlin Firearms Company; H&R 1871 Inc.; Sturm, Ruger & Co.; O.F. Mossberg & Sons, Inc.; SigArms Corporation; Taurus International Firearms; Weatherby, Inc., and Smith & Wesson. (www.wildlifemanagementinstitute.org Jan 2000).

WMI has made cosmetic changes to its board of directors, most of whom are still represented under the National Shooting Sports Foundation. The 2010 board is as follows: Chair: Hornaday Manufacturing; Retired Deputy Commissioner, NY Dept. of Environmental Conservation; National Shooting Sports Foundation; ATK Security and Sporting; Boone and Crocket Club; Pheasants Forever; Wildlife Management Institute. 2009 board chair: ATK Ammunition Systems.

(www.wildlifemanagementinstitute.org May 2010).

WMI manufacturers operate under partnership agreements with the Department of Interior and state wildlife agencies:

“No other organization has a greater hand in molding state, federal and provincial resource agencies, typically working away from the limelight to catalyze and facilitate strategies, actions and decisions.”

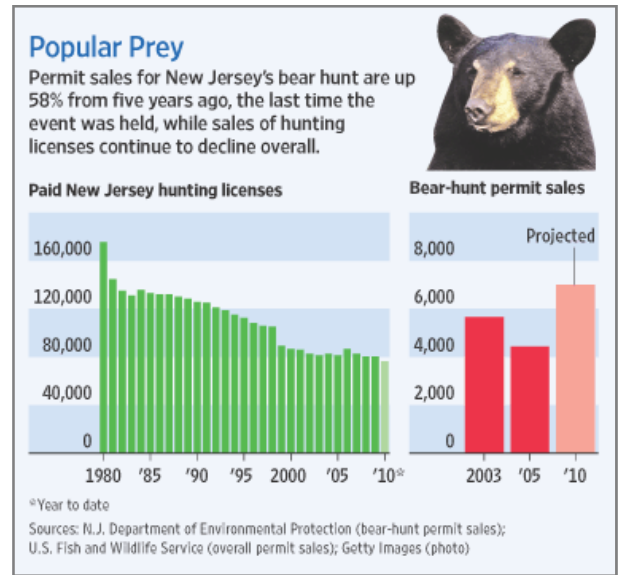
Mission Statement:
wildlifemanagementinstitute.org
Jan 2000. Removed/revised.

Each of the Department of the Interior’s Cooperative Research Units is a “partnership among the U.S. Biological Resources Division, the state natural resource agency, a host of universities and the Wildlife Management Institute.” WMI also “conducts in-depth reviews of state, federal and provincial wildlife agencies’ organizations, authorities and programs.” WMI reach extends to land-grant universities and research funding.

Hunter numbers are “shrinking dramatically” in most states.^[4] New Jersey has seen “a shocking decline in the number of people who hunt in the state,” with a 43 percent drop from 1991 to 2002 alone.^[5] Over 99.4 percent of New Jerseyans do not hunt; statistically, fully 100 percent do not trap.

R&R is first and foremost pecuniary, but also dogmatic; an estimated 79 percent of state wildlife employees are big game hunters.^[6] The subculture is so entrenched at state land-grant university wildlife departments that hard liners favored barring non-hunters from courses.^[7] Wildlife departments were established to “ensure that” the universities “worked hand-in-hand” with agencies.^[8]

“Big game opportunities,” especially in lottery form, can excite current hunters and draw new recruits. A key marketing incentive: the American black bear. While general licenses decline, bear permits are popular.



“Hunters Flock to Bear Down in New Jersey,” *Wall Street Journal*, 12/3/10

Securing Trash and Attractants

The only effective solution

In New Jersey and Maryland, wildlife department spokespersons emphasize sport hunting as a means of separating bears and suburban residents and houses. Yet hunting officials elsewhere openly state what is common knowledge:



Bear-resistant trash bins, West Milford, New Jersey.

Lackey [a biologist with the Nevada Department of Wildlife] Bricker and Ansari all agreed on one point — a bear hunt will not help reduce the number of bear/ human interactions. If a hunter kills a bear in the backcountry, it would be pure luck if that bear happened to be a nuisance bear accustomed to looking for meals in Tahoe's urban interface, Lackey said.

“The only thing that will stop bears from breaking into houses is individuals who reside in bear habitat taking responsibility for securing their trash and reducing bear attractants,” Lackey said.^[9]

And:

“That is the main thing we have to deal with, is limiting a bear’s access to human related food – garbage, dumpsters, and being fed. Eliminating or minimizing that component will remove almost all and any issues that would come up,” Dobey [program coordinator of the Kentucky Department of Fish and Wildlife’s state-wide bear program] said.^[10]



Dr. Steve Stringham

When asked if recreational hunting is the best way to minimize nuisance behavior, Alaska bear expert Stephen F. Stringham, Ph.D., responded:

No.

1. *Killing bears should be a last resort, and it should target only those nuisance bears that cannot be cured, even after people have quit luring bears into misbehaving. Once attractants are eliminated, and intrusions into human habitats are punished (e.g., with pepper spray), virtually every bear will quit raiding. Bears don't deserve capital punishment for problems that people create.*
2. *Recreational hunting seldom identifies or eliminates problem bears.*
3. *All too often, recreational hunting is both inefficient and counterproductive.*
4. *Killing bears treats only the symptoms, not the causes of misbehavior.*^[11]

From Alaska to New Jersey, residents are already convinced:

- New Jersey: According to a 2010 statewide survey conducted by Mason-Dixon Polling & Research, Inc. for the Humane Society of the United States, 74 percent of registered voters prefer that the state prioritize non-lethal methods of solving conflicts between humans and bears.
- Alaska: “Despite this, the overwhelming majority of residents (88%) agree that most problems with bears in the Anchorage area can be prevented by taking a few simple precautions, such as using bear-proof garbage containers. The large majority of residents (84%) support fines for not storing garbage to prevent problems with bears, and the overwhelming majority (85%) support a regulation or ordinance to require Anchorage area residents to use bear-proof garbage containers in neighborhoods frequented by bears. The large majority of residents (71%) also support paying more for their trash service if the city of Anchorage were to provide bear-proof garbage containers.”^[12]
- “Opinions on management options for bears and moose indicate that Anchorage residents are tolerant of wildlife. A majority of Anchorage residents oppose having wildlife authorities destroy some black or brown bears in Anchorage every year to reduce the population (54% oppose regarding black bears, and 53% oppose regarding brown bears), and a majority (63%) oppose having wildlife authorities destroy some moose in Anchorage every year to reduce the population.”^[13]

The most common issue, “far exceeding any others, is a problem with garbage, distantly followed by problems with or damage to birdfeeders.”^[14] This is true in New Jersey, West Virginia, Nevada, Oklahoma, Maryland, and California.

Bear Smart, effective remedies exist:

- Based upon case studies, the Wildlife Conservation Society confirms that securing trash is highly effective in discouraging bear-human interactions.^[15] (See New Jersey Bear Smart Legislation):

“The good news is that efforts to reduce the availability of anthropogenic food to bears can be quite successful at reducing bear-human conflict, as evidenced by some of our case studies. An important message from the New Mexico case study is that when food was made unavailable, bears were capable of living in close proximity to humans without conflict.”^[16]
- Data from three national parks, three local communities, five states (including Alaska and New Jersey) and one Canadian province demonstrate that at every hunted site, there was no observable effect in reducing the human complaints/conflicts.
- Under hunting regimes, complaints/conflicts ultimately increased. At each site employing Bear Smart methods, complaints and conflicts showed marked reduction. (Edward Tavss, Ph.D., “Correlation of reduction in nuisance black bear complaints with implementation of (a) a hunt vs. (b) a non-violent program,” Final Report, 4, 2005.)

Bear Smart programs, when enforced, work. Hunting is ineffective, and can lead to increased “nuisance” behavior. (See Bears, Food, Trash, and Effective Programs.)

In the seven years that Pennsylvania killed the most bears in its history, complaints skyrocketed and bears roamed widely, resulting in an intensified slaughter.

Human-bear interactions are the result of rapid encroachment in bear habitat, the availability of human-generated food that inevitably follows, and the seasonal availability of natural foods.

Among these variables, the essential step to living with bears is the removal of unnatural food sources. Hunting does not keep surviving bears out of people's yards; bear-proofing does.

The nexus between food and complaints was acknowledged by the New Jersey Division of Fish and Wildlife in its 1997 "Black Bear Management Plan": "McCullough (1982) notes that 'restricting human food availability is the obvious and most important step toward solving bear problems because positive conditioning with food rewards is probably the strongest form of learning for bears.'"^[2] (Emphasis added.)

Averting Bear Smart, At All Costs

Despite the Corzine Administration's persistent prodding and the expenditure of hundreds of thousands of taxpayer dollars designated for non-lethal purposes, the Division of Fish and Wildlife managed to keep a bona fide bear-smart program at bay. Instead, division bear biologist, Patrick Carr, told *Field and Stream* that he would use his time to develop the case for a bear hunt.

The bureau printed a blizzard of educational flyers and conducted mandated "sweeps," yet shunned the basic requisites of any bear-smart program: uniform local ordinances requiring bear-resistant garbage containers and dumpsters, requiring that trash cans be set out in the morning, and enforcement.

Flyers and a few seminars are no substitute for uniform ordinances and enforced laws. The game council and division provided no less than four reasons why the state would not enforce the state feeding ban, at the same time claiming "98 percent compliance." Both continue to exploit easily avoidable conflicts to justify bear hunts.

The agency has written only nine summonses since 2004 for bear-feeding violations. (See NJDFW Science and Non-Lethal Efforts Questioned.)

Conflict: The Baiting Problem

The Fish and Game Council and the division refuse to halt widespread corn and molasses baiting for recreational deer hunting, and bear baiting itself, which draw bears toward populated areas and provides an unnatural food source that, in conjunction with unfettered trash, leads to higher breeding rates:

- The 2006 Responsive Management New Jersey survey reported that 41 percent of the state's deer hunters hunt over bait (corn, sweet potatoes, apples). Fourteen percent use time-released feeders. Most hunters set out bait for weeks prior to the season.

For years, a number of hunters across the state [New York] have been setting up bait piles (doughnuts, sweet pastries and other food scraps) up to nine days before the beginning of the bear hunting season to increase their chances. . . During the season, they spread special scents (also called lures) near the spot to keep the bears coming back.

"It was black and white. Nearly everyone was using it," said Al LaFrance, of Pompey, a veteran bear hunter. I'd estimate some 85 to 90 percent of the bear killed in this state (are) taken (by pre-season baiting)." ("Bear Hunters say DEC's new rules on feeding bears will hurt their sport."

— *The Post-Standard*,
March 4, 2011

In New Jersey, baits and lures are legal, attracting bears, and deer, closer to human centers.

There is also the matter of hunter debris:

A provincial consultant's report [unreleased; obtained under Canada's Freedom of Information Act] says sloppy camp conditions and questionable hunting practices are creating an extreme danger of attacks on humans, and the needless slaughter of grizzlies in B.C.'s Northern Rockies.

Bear biologist Wayne McCrory found that hunters routinely leave groceries, game carcasses, garbage, and horse feed at their campsites during hunting trips. Grizzlies search out these attractive sources of food, become aggressive, and have to be shot.

— Larry Pynn, "Hunters, bears at risk because food, debris are left at campsites," *Vancouver Sun*, December 1, 2003

The researchers found that "hunters contribute significantly towards the development of problem or nuisance bears," leading to a "downward spiral of increased aggression, food-seeking travel to obtain food from camps, eventually ending in bear mortality."

Motive Matters

Nor is it happenstance that new hunts are marketed in the same way. Industry poll tester Responsive Management reports that when it comes to black bear hunts, motive matters: the public rejects trophy and recreational killing, whereas “population control” gains acceptance. So does framing unpopular activities, such as fur trapping, under the rubric of “science.” (See Poll Tests.)

A pointed example is the Nevada Department of Wildlife's claim that black bears are “expanding rapidly.” The notion, absent a point of reference, plants the misimpression that Nevada's tenuous population of 200-300 bears requires control, via trophy hunting. (See Nevada Lottery.)

The effort is sustained by a considerable public relations cadre. Point to Point Communications, run by former fur and shooting industry lobbyists and publicists, played a key role in setting the stage for bear hunts (see *Redefining the Black Bear as a Liability*). Through the AFWA, publicists and poll testing firms in turn direct state game agency communications departments, providing reams of communication guides and strategies. For bear lotteries, game department spokesmen promote video packages. No less than two such promotions (*Star Ledger*, *Wall Street Journal*) appeared in the weeks leading up to the 2011 New Jersey bear hunt. In the former, the camera lingered on the carcass of a goat killed by a bear.

As for some of the more lurid, if infrequent, features of the videos, respondents to a Maryland survey disagree:

- Of those who have encountered a black bear in Maryland, 74% described their encounter as a very or somewhat positive experience.
- Less than a quarter (23%) of all respondents agree that black bears will kill many livestock and pets in Maryland (this statement had the lowest percentage in agreement).
- A majority (64%) of all respondents strongly or moderately support the use of electronic fencing around small area bear attractants such as beehives and aviaries to avoid problems with black bears in Maryland; 25% of all respondents moderately or strongly oppose the use of electronic fencing around small area bear attractants.^[17]

Electric fencing is especially important for the protection of small farm animals, from any number of threats, and for the safety of black bears. An animal sanctuary in northern New Jersey installed an electric fence on 3 acres, at very reasonable cost.

Contrary to video-honed perceptions, the black bear is mainly vegetarian, and peaceable:

Black bears are primarily vegetarian, but bears will eat pet food, garbage, and other human-made food sources if people are not careful. These situations have led to irate homeowners, shootings, and dead bears. Getting along with bears is not difficult so long as we don't store food and waste haphazardly. When asked what to do when you encounter a bear, I say to enjoy the opportunity by watching quietly and making room for the animal to pass.^[18]

Minnesota Department of Natural Resources

Goal: Sustain and increase participation in hunting by recruiting new and former hunters and retaining current hunters.

Objectives:

1. Increase the recruitment rate of youth
2. Increase the recruitment rate of adults, including non-traditional groups
3. Increase the retention rate of current hunters
4. Increase the number of hunters participating in multiple hunting disciplines
5. Reintegrate former hunters
6. Create a positive image of hunters and hunting among the general public

Guiding Principles for Boosting Participation

1. **Make it Easy.** Barriers to participation need to be reduced. Regulations that limit participation should be identified and re-evaluated to weigh the impact on hunter participation against other justification for the regulation.

2. **Invest Early:** The younger an individual starts hunting; the more avid they tend to be, and the less likely they are to desert.

3. **Diversify the Portfolio, Don't Put All Your Eggs in One Basket:** Hunters that pursue multiple species or hunt in multiple seasons are less likely to drop out of hunting because they have more options and opportunities to participate, making them better equipped to deal with adversity. A gun deer hunter has a short window of opportunity, but a bowhunter has a wide one. Grouse specialists have population crashes every decade, how do they fill the lull? Plus, hunters that buy multiple licenses can help address the fiscal impacts of a non-growing hunter population.

4. **Location, Location, Location: Access to places to shoot and hunt that are close to population centers facilitates recruitment by making it easier to fit trips to these locations into busy schedules.**

5. **Fight Fire with Fire:** Competing recreational activities are actively trying to draw new participants using marketing. They are able to move their activities to “Top of Mind”, where hunting does not hold that same distinction. Hunting needs to get into that indirect battle.

9. **Know thy Enemy/Competitors:** We have to recognize that competing interests are the competition. If kids are playing soccer 7 days a week, they aren't hunting, so soccer is a competitor. If they are not the enemy, they certainly are rivals.

Merchandising the Black Bear

As described by the Arizona Game and Fish Department recruitment and retention specialists:

- “Opportunities to hunt including increased chances of success in the big game hunt permit-tag draw, are important to hunter retention,” say big game applicants.^[19]

“Black bears are considered an under-utilized game species,” notes the British Columbia Fish and Wildlife Branch when considering an extension of the spring hunt season and lifting the ethical prohibition on hunting bears for skins.

“The number of resident hunting licences [sic] in British Columbia peaked at 174,000 in 1981 and has declined ever since, with only 84,000 being sold in 2004.”

Other options:

“Reduce the cost of a basic hunting licence and consider other possible cost reductions such as:

- Combination prices, for example a 20% discount on species licences after the first one is purchased – e.g. a hunter pays full price for a moose licence and then receives a 20% discount on a mule deer licence and a black bear licence.
- Conduct a marketing survey to determine new types of hunting licences that would be of interest to hunters.”

“A Strategy for Resident Hunter Recruitment and Retention in British Columbia,” undated.



BEAR HUNTING EXPERIENCE FOR NOVICE HUNTERS

Beginning in 2005, the Wisconsin DNR began offering Learn to Hunt opportunities. The Learn to Hunt Bear Program (LTHB) is another tool to expose novice hunters to the hunting experience and recruit new hunters into the sport. The Learn to Bear Hunt Program represents the opportunity of a lifetime for a novice hunter.

Bear Hunting Experiences for Novice Hunters.” May, 2011. - Wisconsin Department of Natural Resources.

The Future of Hunting: Recruitment and Retention Efforts are Crucial

By Rory Aikens, public information officer, Arizona Game and Fish Department

The concerted effort to increase hunter recruitment and retention in Arizona didn’t happen overnight, but it did have a major point of genesis.

The management shift in Arizona to create more hunting opportunities and to remove existing barriers to participation ties back to a report from the International Association of Fish and Wildlife Agencies in 2004, outlining efforts by state wildlife agencies to increase public participation in hunting and shooting sports.

The second recommendation:

Evaluate existing big game draw and hunt structures to maximize hunting opportunity on a sustainable basis.

(Arizona Game and Fish Department. Hunting Blog: Hunting Highlights. December 27th, 2007)

R&R State Black Bear Lotteries and Hunts

“It’s been mega-controversial,” said Chris Healy, spokesman for the Nevada Department of Wildlife.^[20]

Inaugural bear lotteries are tantamount to shooting fish in a barrel: the bears, including those handled by humans as research bears, have no reason to fear humans wielding bows, guns, or packs of dogs. Maryland bears were so vulnerable that the state was forced to close the hunt on the first day:

DNR Closes Bear Hunting Season Due To Overwhelming First-Day Success

MT. NEBO – Maryland’s first bear hunt in 51 years IS CLOSED EFFECTIVE IMMEDIATELY AND WILL NOT RE-OPEN due to overwhelming first-day success.^[21]



Lake Tahoe

The Nevada Lottery: First Bear Hunt in 151 Years.

In 2010, the Nevada Wildlife Commission, which governs the Nevada Department of Wildlife, initiated the first black bear hunt in 150 years. The commission allowed hunters to use tracking dogs and bows.

Nevada counts 200-300 black bears in the state. Staging a lottery, the commission set a kill quota of 6 females, or 20 bears, total.^[22] A series of polls had shown a decisive majority of Nevadans against the hunt. Lake Tahoe, which hunt proponents implied would “benefit” from the hunt, vocally opposed it.

“Nevertheless, the possibility of a legalized hunt has stoked outrage throughout the Tahoe community, particularly on the Nevada side of the lake.”^[23]

“Many people who live in Tahoe have formed a deep emotional affinity with the animals,” said Kathryn Bricker, a Zephyr Cove resident who has collected more than 500 signatures on a petition opposing the bear hunt.”^[24]

“Someone could be out hiking the Tahoe Rim Trail with their family and along comes a pack of dogs running across the trail, followed by a guy who comes along with a gun,” said Madonna Dunbar, resource conservationist for the Incline Village General Improvement District on the lake's north shore. “People are really concerned there will be an accident and someone will get killed.”^[25]

At that point, “commissioners emphasized that the hunt was approved not as a method of dealing with specific bears that invade homes and vehicles in residential areas, but because hunters requested a season to coincide with those in neighboring states.” Hunter Jeliedo Tiberti, gave his view in a single sentence: ‘I’m from Southern Nevada, and I would like to go up there and whack one of those big bears.’”^[26]

To justify the sport hunt, the Nevada Department of Wildlife claimed to be controlling a “rapidly expanding” bear

population.^[27] At 200-300 bears, the Nevada population is tenuous; the prescribed kill total was 20 bears, or 6 females, whichever came first. In Nevada, the black bear is especially vulnerable to urban sinks. Unsecured trash in urban centers lures bears from the backcountry, depopulating wild areas as urban bears suffer high mortality rates.^[28] Critics demanded that the head of the department step down for allowing the trophy hunt, replete with dog packs and bows.

“There's been a lot of passion,” said Chris Healy, spokesman for the Nevada Department of Wildlife. “In my 25-plus years with the department, it was by far the most controversial decision we've been involved with.”^[29] Despite unmistakable majority opposition, Healy’s department went ahead with the R&R hunt.

The Maryland Lottery: First Bear Hunt in 51 Years.

“DNR Draws Winners In 2011 Black Bear Permit Lottery.” In 2004, with a scant population of “an estimated 227 adult and sub-adult bears (27.3 bears per 100 sq. mi.) in Garrett and western Allegany counties,”^[30] the Maryland Department of Natural Resources and game council inaugurated the state’s first black bear hunt, a lottery, in 51 years. The “target harvest” was 30 black bears.

Despite that number, and despite the majority of Marylanders’ view that the black bear is “rare,” the department justified the event as “population control”: “The primary goal of this hunt was to begin slowing the growth of the regional black bear population; this effort is an unqualified success toward that end and ensures a sound foundation for the future of black bear management in Maryland,” said Maryland Department of Natural Resources Wildlife and Heritage Service Director Paul A. Peditto. (See, Poll Tests.)

Announcing the kill tally, the department titled its press release: “DNR Announces Black Bear Hunt Harvest Numbers; Declares Hunt A History-Making Success.” The hunt, said bear project leader Harry Spiker, “reinforces our belief that this hunting strategy will potentially reduce vehicle strikes and other conflicts between bears and humans.”

Thirty bears had been killed; Maryland ultimately saw an increase in incidents:

Trash complaints in Allegany County increased considerably (64%) when compared with 2008. Garrett County residents also reported an increase in garbage complaints, 37% higher than in 2008.^[31]

Pre-hunt, DNR had pointed to complaints to justify a hunt; post-hunt, the bureau attributed the increase to a paucity of natural foods – a fact long maintained by wildlife protection organizations, including the Animal Protection League:

Climate

The New Jersey Game Council, by statute dominated by sport hunters, ascribed any reduction in bear complaints to hunts. The Ontario Ministry of Natural Resources reports that following cancellation of the spring bear hunt, “[T]he committee’s report found no scientific connection between cancellation of the spring bear hunt and increases in bear activity. Instead, the report concluded that nuisance bear activity is linked to the availability of food and climate conditions.”^[32]

According to Responsive Management, respondents were asked four questions regarding perceived problems with black bears in Maryland. A majority (52%) of respondents moderately or strongly disagree that black bears in Maryland are dangerous to humans.^[33] Overall, a majority (91%) of all respondents agree that most problems with black bears in Maryland can be prevented by taking a few simple precautions, such as using bear-proof trash containers (this statement had the highest percentage in agreement).^[34] – even when the question was predicated on a preposterously high “cost” seeming to beg disagreement:

Q61. Would you support or oppose requiring people visiting or living in black bear habitat to use bear-proof trash and food containers that would cost approximately \$700, to avoid problems with black bears in Maryland?^[35]

In an effort to increase hunter success, Maryland biologists are studying bear movements in reaction to hunters:

In Western Maryland a project will continue this year which monitors the movement of bears and hunters during hunting season. The project is designed to see what reaction bears might have to the presence of hunters in the area. Hunters and bears have been equipped with GPS tracking devices so that researchers can track the movements of both... Kinda like watching someone else play a video game as you can watch the movement of both sides. “If a hunter’s in close proximity to a bear, how does the bear react? How are bears reacting overall when the hunters go into the woods? Do the bears change their movements? Do they not? That’s one of the things we’re trying to find out,” said biologist Steven Bittner.^[36]

If a hunter has killed, wounded, or injured a black bear, he may use a dog and dog handler, to recover the bear.



Sierra Stiles, 8, killed first bear in 2005 Maryland bear hunt. Maryland DNR.

Kentucky: First Black Bear Hunt in 100 Years.

Kentucky gets first bear hunting success since early 1900s

Smith bought a bear license after seeing signs of a bear during a hunt for coyotes, according to a release from Fish and Wildlife officials. He found a promising area and using binoculars, he spotted a bear about 240 yards away. He shot the animal with a .270-rifle. —Woods and Waters Online. 29 Dec 2010. (John McCoy)

“Low density population.” The 2009 inaugural Kentucky hunt, alternately promoted as “First Black Bear Hunt Ever!!!” and “The First Bear Hunt in 100 Years,” exemplifies R&R exploitation despite low population status. Nowhere in Kentucky Department of Fish and Wildlife news releases or related news articles was the 2009 estimated black bear population stated. That is because the true number was both low and unknown. In 2007, the department described its information as “based on limited data” and the black bear’s future in Kentucky “uncertain”:

2007 “Management Recommendations”:

While this population appears to be increasing in both size and range, the future of the black bear in Kentucky is uncertain. The increasingly fragmented landscape of eastern Kentucky poses many challenges to the persistence and expansion of the black bear population.^[37]

In 2003, University of Kentucky researchers predicted: “In 10 years we’ll probably have a really good idea where this population is going.”^[38]

As outdoor activities in California go, bear hunting is not particularly popular. Officials estimate that, at most, 1% of the state’s population hunts black bears. Many of the other 99% are appalled that anyone does.

“I think most people think of it as an anachronism,” said state Fish and Game Commissioner Michael Sutton, who speculates that the state’s voters may soon ban the practice.

-California considers easing rules on black bear hunting, Los Angeles Times, 19 Apr 2010.

Absent definitive population estimates for a “low density”^[39] species recolonizing the extreme eastern part of the state as late as 2004, Kentucky game officials moved forward with a permit bear season in 2009. The reason: “The League of Kentucky Sportsmen and others have pushed for a Kentucky black bear hunt for several years,” according to the Kentucky Department of Wildlife. “Sportsmen and sportswomen of Kentucky should be very excited . . .” said Steven Dobey, black bear biologist for the department.^[40] “The 2009 hunt quota is a conservative one of 10 bears, or 5 females, whichever limit is reached first.”

In 2011, two years after the inaugural hunt, Dobey provided a public, if loose, estimate of “. . . less than 500 bears, — far fewer than the populations in its neighboring southern



Eastern Kentucky black bear

Appalachian states — but that number is rising, albeit slowly. Bears have one of the slowest reproductive rates of all large mammals. People, they want to associate them with deer, turkey and elk (populations) that explode and go everywhere but bears just aren’t like that — their reproductive rates are very, very slow,” he said.^[41]

As is the case for all black bears exposed to a first hunt, Kentucky’s bruins had no reason to fear humans wielding bows or guns (or, in other states, unleashing packs of dogs).

California R&R Bear Hunt: Permit GPS-Collared Dogs, Raise Kill Limit.

In 2010, the California Department of Fish and Game sought to increase client success (R&R) by eliminating a cap on bears killed per season and allowing bear hunters to put collars with GPS tracking devices on their dogs. Owing solely to public outrage and opprobrium, the agency tabled the two proposals. Still, the state held a bear hunt.

As noted by the Los Angeles Times: “Nearly 70 environmental, community and animal welfare organizations have lined up against the proposals. . . In San Luis Obispo County, the board of supervisors passed a resolution last month opposing expansion of hunting into their area.” The black bear population in California, which encompasses 163,695 square miles, is estimated at 31,000.

Oklahoma’s First Bear Hunt: 2009.

There were but 450 black bears in Oklahoma by 2008. As early as 2000, the Oklahoma Department Wildlife Conservation asked Oklahoma State University students to research the population “in the interest of proposing a bear hunt.”^[42] The kill limit was 20 bears. The stated purpose was to prevent bears from becoming nuisances.

The Oklahoma bear hunt seemed a clubby affair. The hunter-run Oklahoma Wildlife Commission said the “hunt is the result of more black bear sightings in the state” and an increased, if unquantified, number of “nuisance calls.”^[43] One such nuisance complaint was lodged by bear hunting guide Steve Morris, who “shot bear number 4” during the premier hunt. Morris had claimed a “nuisance” bear had “torn apart” his deer feeder and “was laying in my backyard.”^[44]

“Morris shot bear number four. He shot it near his home and said the 200 pound animal put up a fight after being struck. ‘He took off into the woods up in the national forest and we had to track him down,’ Morris said. And even for an avid hunter Morris said there’s always a first. ‘I used to guide in Montana in the 1980s and I hunted a lot of bear up there, but I had never taken one with a bow,’ Morris said.”^[45]

Wildlife Commissioner member Joe Hemphill “checked a 225 pound bear.”^[46]

New Jersey Black Bear Lotteries: 2003, 2005, 2010, 2011.

“Any gender, any age”; abnormally high female and cub kill totals; disputed baseline population data; post-hunt alteration of pre-hunt kill predictions; poor enforcement, bear feeding ban.

According to Patrick Carr, Division of Fish and Wildlife (DFW) supervising biologist, “successful” hunts led to state endangerment:

“Program information also noted that there were successful bear hunts in New Jersey from 1958 – 1970, and again in 2003 and 2005. Although the season was closed in 1971 and 2006, black bear are still considered a game species.” (MINUTES OF THE MEETING OF THE NJ FISH AND GAME COUNCIL, Mar 9, 2010). Emphasis added.

The State closed the season in 1971 because there were no bears. From 1958 to 1970, through “regulated, scientifically sound,” hunting, the Division of Fish and Wildlife and the New Jersey Fish and Game Council successfully extirpated the black bear in New Jersey. Over 12 years, division staff permitted sport hunters to kill 46 bears, by bow and gun.^[47] A 1981 division report cited 10 bear sightings in New Jersey.^[48] As



New Jersey: two cubs and a deer killed on Dec. 6, 2010.

early as 1988, the division and council attempted to re-instate the trophy hunt.

To maximize hunter success, New Jersey biologists permit the killing of mothers and cubs, the latter weighing as little as 30 pounds.

New Jersey hunters are taking an abnormally high, and unexplained, number of females:

NJDFW Kill Data Sex-Ratio				
<u>2003:</u>	64% Female	36% Male	Total kill tally:	333
<u>2005:</u>	58% Female	42% Male	Total kill tally:	298
<u>2010:</u>	60% Female	40% Male	Total kill tally:	592
TOTAL:				1223

In California, which has a population of 31,000 black bears, cubs under 50 pounds and mother bears with their cubs may not be killed. In Montana, mothers with cubs may not be killed. The same is true for Kentucky and Nevada.

In the Catskills, the bear season was structured to protect pregnant females; 37.8% of the bears killed in the hunt were female.

The abnormally high percentage of female black bears killed in 2003, 2005 and 2010 hunts left many cubs orphaned. Bears in hunted populations range more widely. According to the Government of the Northwest Territories:

“Young bears are extremely vulnerable during their first year alone and mortality is high. Without the protection of their mother, yearlings are susceptible to the attacks of large male bears, and with their lack of foraging experience they are easily attracted by food at dumps and campsites, and may end up being shot as ‘nuisance bears.’”^[49]

During the 2003 inaugural bear hunt, hunters killed 74 research bears.^[50] The division was unresponsive to several Open Public Record Act requests regarding the number of radio-collared research bears in the kill tally.

The council and division allow baiting. “Other methods such as driving and simply sitting and waiting in areas where bears live were popular hunting methods,” said Patrick Carr, division biologist told huntingclub.com (undated).

According to Responsive Management:

“Regarding feeding wildlife in conjunction with hunting, there is much opposition, with mostly *strong* opposition, to hunting black bear over bait: 80% oppose hunting black bear over bait with a gun, and an equal percentage oppose hunting black bear over bait with a bow; support is 16% and 15%, respectively.”^[51]

NJDFW Science and Non-Lethal Efforts Questioned

The New Jersey bear hunt is not in the interest of public safety. If it were, effective and tried remedies exist. Bent upon a hunt, New Jersey’s hunting agency will not enforce the key components of mandated non-lethal policy.

In response to *NBC New York* reports that “dozens of trash cans in Alamuchy, Independence and Liberty Townships were not bear-proof,” on the first day of the 2010 bear hunt, Division of Fish and Wildlife director Dave Chanda shrugged that bear-resistant containers were not “mandatory.” That is the point.

According to *NBC News*, former New Jersey Department of Environmental Protection Commissioner Mark Mauriello doubted the division’s educational efforts, and the validity of division complaints:

NBC NEW YORK



Former DEP Commish Questions Science of NJ Bear Hunt

By Brian Thompson (Wednesday, December 8, 2010)

A black bear was spotted in Bergen County.

Even as the latest count shows 426 bears killed in New Jersey's first bear hunt in five years, former Department of Environmental Protection (DEP) Commissioner Mark Mauriello told *NBCNewYork* in an exclusive interview that he has serious questions about the science that led to this hunt.

“I’m not a hunter, I’m hunting neutral,” Mauriello said on the second day of the hunt. Mauriello said he is impartial, noting that “I am not a vegetarian” and that a hunt can be a “reasonable tool.” But he questions whether the hunt is based on facts or faulty reports of bear sightings.

So far, more bears have been killed on this hunt than in recent years. On the first day 264 bears were bagged, and by late afternoon Tuesday, another 77 bears were brought in to the state's five checkpoints. That two day total surpasses the entire number taken in both the 2003 and 2005 hunts, and there are still 4 days to go. Nonetheless, Mauriello had doubts about whether the rise in bear complaint statistics to justify the hunt is based in reality.

The DEP's Fish and Wildlife Division said complaints have risen sharply and that this week's hunt will “stabilize” the bear population. “I always questioned how we could verify to be sure the calls were real,” Mauriello said in describing his discomfort in using phone calls as scientific evidence.

Earlier this Fall, Rutgers Professor Ed Tavss said his painstaking review of two years worth of complaints showed hundreds of cases of double counting—a finding disputed by the DEP in its own audit.

Mauriello, who worked his way up to Commissioner in the administration of Democrat Jon Corzine after 30 years with the DEP, also questioned his department's own efforts to educate people living in bear country. During his time as Deputy Commissioner and in the top job, he said his compliance officers would report 99% compliance with guidelines calling, for example, with restaurants and convenience stores to use bear proof dumpsters. But when he took a trip into bear country, he saw little evidence of that compliance.

“I just find it a little tough ot believe that anything in this world is 99% compliant anywhere,” Mauriello said in explaining why he felt non-lethal methods were not fully pursued by staff at his agency.

The current Administration has strenuously defended its actions while admitting that bear-proof measures are “not mandatory.” And Governor Chris Christie Tuesday defended his agency, saying “I have absolute confidence in the Commissioner of the DEP (Bob Martin) that he presented me with sound reasons scientifically-based for why this is an important program to go forward.”

New Jersey Division of Fish and Wildlife enforcement of feeding bans — and hard-to-miss dumpsters — remains poor. The Division typically issues few feeding warnings per year:

2003: 3	2004: 2	2005: 3	2007: 2	2008: 2	2009:1
---------	---------	---------	---------	---------	--------

Despite the Corzine Administration’s persistent prodding and the expenditure of hundreds of thousands of taxpayer dollars designated for non-lethal purposes, the Division of Fish and Wildlife managed to keep a bona fide Bear Smart program at bay.

The agency printed a blizzard of educational flyers and was ordered by a former DEP Commissioner to conduct mandated, “sweeps.” Yet division staff shunned the basic requisites of any bear smart program: uniform local ordinances requiring bear-resistant garbage containers and dumpsters, requiring that trash cans be set out in the morning, and enforcement.

World Class Experts: Baseline Population Data Exaggerated

Experts dispute the Division of Fish and Wildlife baseline population estimate of 3,278 black bears as exaggerated and questionable. “The precision of population estimates is poor,” counsels a peer reviewer (Diefenbach, 2006).

An expert panel convened by the Department of Environmental Protection in 2003 “yielded a conservative estimate of approximately 1350” — not “3,238” — “adult black bears in New Jersey through 2003. To do so, the panel did not rely upon the Fish and Wildlife estimate.” Part of the division’s inflated baseline data and small sampling size was the underpinning for the vaunted “DNA” study later advertised by division biologists. (“The New Jersey Independent Bear Panel Report,” March 6, 2003)

Lynn Rogers, Ph.D., is a black bear expert consulted by the *New York Times* and the *BBC*, among others. His bear studies ranked among the top four large mammal studies in the world, along with the works of Jane Goodall, Brian Bertram, and Ian Douglas-Hamilton (African elephants), and garnered encomiums from E.O. Wilson.

Dr. Rogers’ comments:^[52]

Rogers, Lynn

Critique by Lynn Rogers of a report by Patrick Carr and Kelcey Burgess (2003) entitled "Estimation of Population Size of Black Bears in Northern New Jersey"

Commissioner Bradley Campbell and Counselor Dante Di Pirro of the Department of Environmental Protection deserve a public thank you for recognizing the need to examine New Jersey's bear population data and convening an impartial panel of scientists and interested parties to accomplish that task. New Jersey's bear population has obviously increased in the last three decades, but the size and rate of that increase are in question. I hope these comments are helpful to the Commissioner and the DEP.

Based on 12 years (1980-1992) of intensive field research, New Jersey researcher Patty McConnell estimated New Jersey's black bear population to be 575 in 1996. Projecting forward (page 79), she estimated that the population would reach 675 in 2001 and 875 in 2006 and stated that these estimates were for the entire state of New Jersey (McConnell et al. 1997).

Carr and Burgess (2003) used McConnell's data and other data to make a different population estimate. They estimated that the population within the primary range of Sussex, Warren, Passaic, and Morris Counties grew at a rate of 8.5 percent per



Dr. Lynn Rogers has been studying bears for over 40 years.

year and reached 1,146 bears in 2001 (page 1 of Carr and Burgess 2003).

Carr and Burgess (2003, page 8) used other methods to estimate the statewide population in 2001 at 930, 1,363, 1,777, and 1,800. They picked 1,777 as their official estimate for 2001 without revealing why this number was selected over the others. The authors rightly showed that the bear range in New

Jersey has expanded, but their population estimates are questionable because the estimation procedures are based on unsupported claims and exaggerated reproductive rates as I will detail below. Essential data is left out of the report, and the authors use as support for their methods misquotes from published works and references to their own unpublished internal reports that have not undergone peer review, were not made available to the panelists, and may suffer from the same shortcomings as Carr and Burgess 2003.

After selecting 1,777 as their estimate for 2001, they used that estimate as the basis for projecting population growth into 2002 and 2003, using a population growth rate of 36 percent, which is nearly twice as high as has ever been reported for any bear population. The resulting population estimates were 2,406 bears in 2002 and 3,278 bears in 2003. They did not include confidence limits for their growth rate and population estimates.

We seriously considered this unusual population growth rate in our panel meeting of February 28, 2003, after we were told that Pennsylvania harvested a quarter of its population each year, lost another 1-2 percent as road-kills and still saw the population grow at 6-8 percent per year for a total growth rate of 27-30 percent per year. However, Pennsylvania bear biologist Mark Tenet [sic] told us at the Eastern Black Bear Workshop on March 3, 2003, that those figures are grossly exaggerated. He said that the population in Pennsylvania's primary bear range in the Poconos is held stable by a 20 percent harvest rate. Applying the lower 20 percent growth rate to New Jersey's questionable 2001 population estimate of 1,777, yields population estimates of 2,132 in 2002 and 2,556 in 2003.

One of the problems I encountered in Carr and Burgess (2003) was exaggerated reproductive rates. The authors included yearling females, which have never been known to produce cubs, and two-year-old females, which only occasionally produce surviving cubs. Age of first reproduction is a very sensitive parameter in calculations of population growth. When I recalculated population growth without these large age classes (yearlings and two-year-olds), population growth rate was less than half that claimed by the authors.

The authors state that they attempted to eliminate yearlings by stating that only 80 percent of the bears older than one year were of reproductive age, but this still includes two-year-olds. Moreover, including these two large age classes and then attempting to deduct one or two of them is faulty science that exaggerates reproductive rate. Age of first reproduction is the most sensitive parameter in calculations of population growth rate. The authors dismissed the lower rates published by McConnell et al (1997) as a result of her 1980-1992 New Jersey study without stating why they were now assuming a higher reproductive rate for this species in the same area of the state.



Dr. Rogers with one of his research bears. Photo: Susan Kehoe.

Moreover, in estimating death rates, the authors estimated mortality at only 110 percent of known mortality and presented no information on the source of their known mortality. It seems highly unrealistic that the authors were aware of 90 percent of the bear deaths in New Jersey. This would not take into account natural deaths that the authors did not discover or the public did not inform them about. New Jersey has plenty of forested areas where sick or wounded bears might retreat to and not be noticed by the public. It would not take into account deaths

from unreported or illegal shootings of bears by landowners. And it would not take into account deaths in which bears were hit by cars and died out of sight. The authors did not present any data to support their decision to estimate actual mortality as only 110 percent of known mortality. The decision appears to be entirely arbitrary and unrealistic. Actual mortality could be double, triple, or quadruple the known mortality. There is no way to estimate this. Selecting an unrealistically low mortality rate compounds the problems of exaggerated reproductive rates and further inflates population growth estimates.

Hair Snare and Capture-Recapture Data

Another problem arises in the authors' assumption that their hair snares had an effective area of 6.5 square miles. This figure was based on home ranges in McConnell's study in the primary range. However, Carr and Burgess placed hair snares outside the primary range where bear densities are likely lower. In areas of lower bear density, home ranges expand because there are fewer social constraints on foraging widely. Further, many



New Jersey female black bear, Sussex County, 2006

of the bears in outlying areas are young bears dispersing from the primary range. These bears roam widely, traveling many miles before settling. Thus, the effective area around the hair snares was likely larger than the 6.5 square miles claimed by the authors. Carr stated that some of the home ranges of females were less than 6.5 square miles and that some females that were within the supposed effective radius did not visit the baits and leave hair samples.

Nevertheless, males roam more widely and home ranges vary with food supply and age. The assumed size of the effective area around Carr and Burgess's hair snares is little more than a guess. Miscalculating the effective area can be a huge source of error in estimating population size. For example, if their hair snares sampled bears from only twice the area that the authors assumed, the resulting estimate would be twice as high as the actual population. Since the 6.5 square mile figure is not a result of actual measurement in the areas where they used it, the authors were unable to calculate confidence limits, which means there is no way to judge the validity of the population estimates obtained in this way. Further, the authors state that the hair snare data were not gathered systematically. Consequently, the data cannot meet the criteria and assumptions needed for proper population estimation and are a poor basis for management. Carr and Burgess (2003) used combinations of hair snare and capture-recapture data to estimate the 2001 population at 930, 1,363, 1,777, and 1,800 bears and selected 1,777 as the estimate they preferred.

Carr mentioned on February 28 that he caught nearly as many bears in two years as McConnell caught in twelve years. He did not qualify that, though, by saying that he had seven technicians and huge budget while McConnell often worked alone or with a single technician. Thus, the number of captures per year is more a measure of effort than of population growth.

It is obvious that the range and number of bears has increased in New Jersey, but the comparison that Carr made cannot be used to quantify the increase.

New Jersey has a need to obtain solid population data with proper confidence limits. There is a need to determine (1) how reproductive rates vary with mothers' age and with annual changes in natural food supply, (2) population age structure, (3) causes and rates of mortality for male and female cubs, yearlings, subadults, and adults, and (3) movements of bears in prime range and outside that range (4) how movements change with age, sex, and season, and with annual changes in food supply. Without movement data, it is difficult to assess the accuracy of capture-recapture data as were gathered by the authors by hair snares, etc.

Biases in the data cannot be corrected by just increasing the sample size, they can be eliminated only by understanding the biases and correcting for them, and this can only be done by studying movement patterns and how they vary with the factors mentioned above. Population estimates based on capture-recapture data without movement data can vastly overestimate bear populations.

In my own study area in Minnesota, my capture-recapture data produced population estimates that were double to triple the actual population. These discrepancies in my own data set were revealed when I placed radio-collars on the bears and found that I had been sampling bears from a much larger area than I thought. There is a need for additional radio-tracking and field study in New Jersey. McConnell's data set is growing old, and the population estimates from Carr and Burgess provide an



NJDFW agents killed this mother bear, orphaning two cubs.

unreliable basis for management decisions. For example, suppose that hunting were initiated in 2003 with the goal of stabilizing population size at the 2002 level. Reducing the population from Carr and Burguess' estimated size of 3300 for 2003 to their estimated size of about 2400 for 2002 would require a harvest of 900 bears.

If Carr and Burguess estimates were correct, then 900 bears could be harvested every year. Now, suppose that the true population sizes in those years were 1400 and 1200 as estimated by McConnell. Harvesting 900 bears would reduce the population to 500, and any failure to recognize the severity of the errors could lead to further depletion and endangerment of the population as happened in the mid-1900's.

The greatest needs with an expanding bear population is accurate population data and a vigorous public education program about bear behavior. Education is needed because the greatest problems that black bears face are human misconceptions that cause excessive fear. The number of bears

increase because as people become more familiar with bears, they become more comfortable seeing them.

(Editor's note: In full disclosure, the Bear Education and Resource Group paid Dr. Roger's airfare. Dr. Rogers advised the organization *pro bono*. His game agency counterparts on the panel, however, did not disclose agency partnerships with firearms and archery trade associations, nor hunter retention and recruitment "big game" lottery objectives.)

"We've got some of the biggest bears in the nation," said Patrick Carr, a biologist with Fish and Wildlife, adding that bruins as big as 625 pounds have been tagged in the Garden State. Bear hunting will be in the area north of Route 78 and west of Route 287 in the Highlands region. Although the odds are that only about 5 percent of the hunters will be successful, it seemed that everyone at the fairgrounds was thinking big - particularly about how nice that bear skin rug might look in the den at home."

"Hunters get a lesson on big game." *The Record*, October 27, 2003

In 2000, division biologist Carr and Steve Searles (Animal Planet), the California wildlife officer who pioneered aversive conditioning, conversed while waiting in a pre-interview "green room." Carr said that he didn't care if all of the bears in New Jersey were killed . . . "we'll just bring them back" – to hunt.^[53]

When contacted in November, 2011, to re-confirm what he had stated at the time, Searles said that he could not remember the exact words, but "that was the gist of it."



Larry Herrighty, assistant director, New Jersey Division of Fish and Wildlife, at a hunter-industry PAC rally for then-candidate Chris Christie, who promised the PAC its chief goal: a bear hunt.

that people will tolerate, sometimes called the social carrying capacity as opposed to biological carrying capacity, depends upon human attitudes.

In Pennsylvania, a thousand people per square mile live in a housing development called Hemlock Farms. The people there became knowledgeable about bears, developed realistic attitudes, and peacefully coexist with three bears per square mile. That bear density is probably triple the density of bears found anywhere in New Jersey and is a higher density than is found in any national park or national forest. The people there became knowledgeable about bears and accepted them. As people replace misconceptions with facts, they move past their fears and become more willing to coexist with bears. Complaints about bears often decrease as bear numbers



A New Jersey black bear. To increase hunter success, game biologists are meeting with bear hunters, and, via PowerPoint presentations, identifying, precisely, black bear habitat in the state. Hunters use GPS devices to find and kill the bears.

After the fact, NJDFW changed pre-hunt female kill estimates

Post-hunt, Division said it had predicted high female kill

Prior to the 2003 recreational hunt, Mssrs. Carr and Burgess predicted that male and female black bears would be killed in a 1:1 ratio, and stated that the pre-hunt male/female population ratio was 1:1:

Based on data collected in the adjoining states of New York and Pennsylvania, the sex ratio of harvested bears will likely be about 1:1 males to females in the December season. It is anticipated, based on the experience of other states with a regulated hunting season structure similar to New Jersey's, that bears will be harvested in the same proportion that exists in the population. (217a)

- Instead, 64% of bears killed were female. The Division of Fish and Wildlife and the Game Council then altered pre-hunt estimates and predictions:

"The 2003 and 2005 bear seasons each produced a harvest that was representative of the bear population at the time."(644a)

- Prior to the 2003 bear hunt, as seen above, division biologists stated and believed that males and females existed in the population in a 1:1 ratio. Further, the division predicted that the 2003 kill ratio would be 1:1.
- During meetings of the Fish & Game Council in 2003, the Game Committee told the Council that pregnant females would be denned during the 2003 hunt, and therefore more males would be killed than females. (343a).

The same fabricated "prediction" appeared in the 2005 CBBMP, (26a) and in the 2005 litigation that led to the decision in NJ Animal Rights Alliance v. NJ Dept. of Environmental Protection, 396 N.J. Super. 358 (App. Div. 2007).

It is important to note that contemporaneously, the division claimed it had fully "studied" the New Jersey bear population. It later claimed to have been "surprised." State estimates depend merely on how many permits are sold.

From: A-1603-10: Animal Protection League of New Jersey v. N.J. Dept. of Environmental Protection. App. Div. (Active 2011).

POLL TESTS



Bear supporters demonstrate in front of NJDFW headquarters in Trenton, November, 2011.

The Science of Poll Testing

Game management was not considered a legitimate science until 1933, with the propagation of hunted species, especially white-tailed deer and migratory birds, as "agricultural crops." Game managers or biologists (generally obtained with a Bachelor's degree) however, are not mammalogists, zoologists, ornithologists, or even biologists in the classic sense: the narrow discipline focuses on manipulating animals to sustain annual, and sizable, recreational killing, which in turn sustains commercial hunting. "Biology is the study of life," says wildlife biologist Thomas Eveland. "Game management is the study of death."

And, increasingly, public relations. In response to negative public attitudes toward killing wildlife for recreation and trade, the industry/agency coalition turned to marketing and poll

testing. Communications and marketing programs presently reaping rewards have been in the pipeline for decades.

Responsive Management, based in Pennsylvania, conducts private focus groups, "needs assessments," poll tests, marketing, communications, and business plans primarily for all facets of the wildlife-use industry, from wildlife traffickers and traders ("IWMC World Conservation Fund [or Trust]," a member of the World Council of Whalers, promotes the "conservation and wise use" of endangered species, including African elephants and whales), the National Shooting Sports Foundation ("the trade association for the firearms and recreational shooting sports industry," the fur trade, Safari Club International, and state natural resource agencies. Unsurprisingly, Responsive Management found the American public supportive of whaling.

Population Control

Black bear hunting, advises Responsive Management, is most acceptable if portrayed as controlling the black bear population. The public rejects trophy hunting (10 percent approval rate):



- "The most common reason for supporting [a black bear hunt] is for population control (65% of those who support)." "Tradition (18%) and simply the opportunity to hunt black bears (14%)" garner lower support.^[54]

- “Opinion of specific hunting motivations. Public opinion of hunting varies when the motivation for hunting is considered.”
- “Harvesting animals is a value-laden activity, and any motivation for killing animals that is not seen as legitimate is rejected.”
- “Research has suggested that appeals to ecological concerns over sport or recreation concerns will resonate better among the general population...This same researcher suggested that hunting promotion must strive to put hunting into the context of ecological goals (species management) rather than as a form of recreation or sport. Since hunting for food is a motivation that is much more acceptable to the public than some other reasons for hunting, such as hunting for a trophy, both the ecological goals and utilitarian motivations of hunting should be highlighted whenever feasible.”^[55]

Owing to demographics, that is how managers in the Northeast market R&R lotteries:

- “The primary goal of this hunt was to begin slowing the growth of the regional black bear population; this effort is an unqualified success toward that end and ensures a sound foundation for the future of black bear management in Maryland,” said Maryland Department of Natural Resources Wildlife and Heritage Service Director Paul A. Peditto.

The department news release did not include a pre-hunt black bear population estimate of 227 adult and sub-adult bears in Garrett and western Allegany counties.^[56] The kill quota was 30 bears.

New Jersey game staff incorporates both “science” and population control:

- “Scientists say N.J. black bear population can't be controlled without hunt,” Headline, *The Star Ledger*, March 09, 2010
- “The New Jersey Fish and Game Council cited increasing damage to personal property and threats to public safety as key reasons for its decision to recommend a hunt part of the state's bear management strategy”.^[57]

Among other Responsive Management findings:

- Action Item: Hunting that is seen as benefiting the species as a whole, including wildlife habitat or hunting for meat, is more acceptable than sport of trophy hunting. (p.163).^[58]
- Action Item 152: Approval of hunting for meat has the highest approval of nine possible motivations discussed in a nationwide survey of Americans. Therefore,

communicate that the overwhelming majority of hunters consume the animals they hunt.

[Editor’s Note: the same survey found that “only 22 percent hunted for meat.” The majority hunted for recreation. (p. 91) Responsive Management. New Jersey Deer Hunter Satisfaction. 2006.]

Hunters pursue black bears for the kill, heads, and skins. “Many hunters have stated the view that they do not want the meat, they only want the hide and the current regulation discourages them from hunting black bears,” states the British Columbia Fish and Wildlife Branch.^[59]



New Jersey black bear

During the 2010 New Jersey bear hunt, Division of Fish and Wildlife officials made a point of distributing a few pages of stapled, photocopied, bear-meat cookbooks to hunters – in front of the press. A remarkable number of bear hunters told the press that they intended to eat their prey.

- Action Item 147: In particular, avoid discussing hunting techniques that infringe on the public’s perception of fair chase, such as hunting using high-tech gear, hunting over bait, and use of special scents to attract game.

The problem with the modern approach lies in the public's perception of it. The public doesn't see a bunch of hunters and dogs chasing a bear; they see the civilian equivalent of an armored cavalry division, four-wheeling over hill and dale with every electronic convenience locked in on a fleeing bruin.

The perception problem isn't restricted to firearm-and-hound hunters, either. Bowhunters are creating a public-relations nightmare of their own by shooting bears over bait.

Last fall, bowhunters bagged 725 of the record 1,335 bears killed. I figure at least 650 of them took those arrows while they were lapping up jelly doughnuts from bait sites.

Baiting bears is illegal under West Virginia law. But deer baiting isn't. Bowhunters are skating around the rules by setting up deer-bait sites that contain doughnuts, fish guts, and other bear delicacies.

“Bear hunts send wrong message” By John McCoy, Charleston Daily Mail, 14 Feb 2003

“Scientific” Solutions in Search of a Problem

From Responsive Management, an insight into the ubiquity of the word, “scientific”:

- “The abstract, negative connotations associated with trapping need to be overcome with concrete positive reasons for trapping. The public needs to know that trapping is *sanctioned* (by the state), *scientific* (i.e., based on population estimates set by biologists), and a *solution* (i.e., to a problem). The state sanctioning brings credibility through sponsorship, the use of scientific methods brings credibility through reason, and the presentation of trapping as the solution to a well-defined problem gives trapping a reason for being.” (Emphasis theirs).^[60]

Support for traditional wildlife management activities is often found to be stronger among hunters, rural residents, and people with low educational attainment (Manfredo et al. 1997, Teel et al. 2002).^[62]

- “While trapping remains a controversial wildlife management topic, it is clear that securing a place for trapping in the 21st century means that communication about trapping must portray it as being a scientific, sanctioned, wildlife management solution. People need to know that trapping is based on science and biology, that it is sanctioned by the state agency, and that it is a solution—a means to an end.”^[63]

Parenthetically, the industry has spent over 10 years trying to assign trapping, described by the U.S. Fish and Wildlife Service in 1986 as a “strictly commercial” activity, a “scientific reason for being.”

Portraying Hunttable Wildlife as a Liability:

“Bears In the Backyard”

Redefining the black bear as a liability began with “Bears in the Backyard, Deer in the Driveway: The Importance of Hunting and Trapping in Helping Wildlife,” a product of the

Association of Fish and Wildlife Agencies (AFWA), or, more aptly, a fur industry publicist. The booklet exemplifies the poll tested, if pretextual, industry/agency approach: public safety and controlling slowly reproducing black bear populations. Distributed to the media and to legislators by U.S. Fish and Wildlife Service and state wildlife departments, the booklet counters “lobbying and propaganda efforts” and ballot initiatives “banning hunting and trapping.”^[64] The report was authored by Carol Wynne and Stephanie Kenyon of Point to Point Communications, and by Robert Southwick of Southwick Associates.



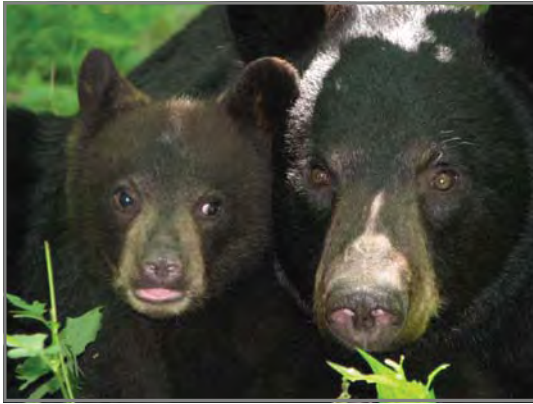
Mother bear with newborn cub. Photo by Lynn Rogers, Ph.D.

The government did not disclose that Wynne is a former executive director of the Fur Information Council, and lobbyist for Wildlife Legislative Fund of America, now the U.S. Sportsmen’s Alliance (see chart). Yet Wynne held a seat — “helping wildlife” — on both AFWA’s Animal Welfare and Fur Resources committees.

Stephanie Kenyon “directed media and marketing for the American Fur Industry.”^[65] Both Point to Point Communications and Southwick Associates specialize in fur and shooting sports reports and public relations. Point to Point is credited with obtaining “major news stories” and “front page coverage in *USA Today*, the *New York Times* and the *Wall Street Journal*.” “He who gets the word out first, wins,” says Wynne.^[66] Current estimates show Point to Point Communications employs 1 person, with an annual revenue of \$53,000.

“Bears in the Backyard, Deer in the Driveway” was paid for by Federal Aid in Wildlife Restoration Administrative Funds. The materials were produced for AFWA through the U.S. Fish and Wildlife Service and are distributed under the government’s imprimatur. It was created “for the media”:

Communicating the costs of losing hunting and trapping — Rachel Brittin — In December 2004, the International Association of Fish and Wildlife Agencies (IAFWA) released a report, *Bears in the Backyard, Deer in the Driveway* 2004, which illustrates a growing problem — effectively and efficiently managing wildlife populations in the face of threats of losing our two of our best management techniques — hunting and trapping.



*Black bear mother with one cub prior to 2010
New Jersey bear hunt*

IAFWA's [AFWA] Public Affairs Director, Rachel Brittin will explain how communications professionals country can speak with one voice, particularly when faced with more people/animal conflicts. Bears in the Backyard, Deer in the Driveway 2004 is specifically designed for use with the media, and is not meant to be a scientific report.

Rachel will review specific case studies on deer, beaver and bear cited in the report, as well as provide examples of conflicts between wildlife and people — many examples pulled directly from newspaper articles around the country. As the report has a long shelf-life, where you, as a communicator, can find many ways to use the piece to garner attention from your local media.
[67]

Notably, the above words were spoken, the guide used, at a “Teaming with Wildlife” (TWW) training session. Dave Chanda, presently director, New Jersey Division of Fish and Wildlife, was a presenter. AFWA formed TWW, a partnership with Audubon, national and state, shooting sports interests, firearms and archery trade associations, the Nature Conservancy (See, Green Washing, Washington Post), and agencies ostensibly to engage in broader conservation – and access public funds. All committed to sharing public resources, promoting hunting in the schools, sport hunting, and hunter access. Lobbying for state and federal grants focused on aid for (non-hunted) species in “greatest conservation need.”

In 2004, AFWA updated “Bears in the Backyard” and substituted putative government authorship for Point to Point’s, correcting the appearance, but not the fact, of impropriety and conflict of interest.

In exploiting the black bear for R&R, the industry/agency coalition, for all of its public relations and national polling firm prowess, has met unexpected resistance.

The black bear is a magnetic species whose killing elicits strong human emotion. For too many, New Jersey’s week-long

killing season, replete with hourly and daily updates trumpeting the number of bruins downed and “hunter success,” is anathema.

Ursus americanus approaches or matches, writes Dr. Rogers, the porpoise in intelligence. The animal are playful among themselves, and have every interest in avoiding, even fearing, humans. “Bears are killed for what people think they do, not what they actually do,” said Rogers.

Despite its size, which can intimidate, the black bear is generally wary or timid. Before hunting decimated the species in New Jersey, black bears would “sometimes be seen sharing a blueberry patch with a lone human berry picker” (Thomas, 1977). Contemporaneously, the animal was prone to “mischief” — not terror.

No one is suggesting that we frolic with black bears. To the contrary, securing our trash in bear-resistant bins and dumpsters, refraining from feeding bears, and giving the bruins a wide berth will lead to co-existence.

Those used to living with black bears fear them least. In 2003, the New Jersey Department of Environmental Protection had falsely reported that a bear was “out to eat” a young hiker in Wawayanda State Park. As reported by the *New York Times*, the young woman had instead told state biologists that when knocked down, she had elbowed the bear in the nose and hid behind a tree. The bear “did not pursue her and wandered away into the woods.”^[68]

The *Times* reporter interviewed park visitors and employees:

An employee in the heavily wooded, 16,000 – acre park who insisted on remaining anonymous said bears were seen by park workers and visitors almost daily. The animals, said the employee, have never attacked anyone.

Visitors questioned today said they had not heard of Sunday’s incident but were not concerned about their safety.

“We see bears here all the time,” John Foley, of West Milford, said as he, his wife, and their children – Marie, 11, and James, 5 – arrived to fish. “We try to give them a wide berth.” Mr. Foley said that the bears always ran off at the sound of clapping and other loud noise.”

“In my opinion, they are harmless unless you are just asking for it,” said Oklahoma game warden Brady May.

Industry/agency recruitment and retention objectives, versus stated public rationales for bear hunts, differ markedly. Yet the public debate remains mired in, and defined by, AFWA’s poll-tested/publicist terms: public safety, for which genuinely effective remedies exist, and the finer points and validity of partisan agency population estimates. It is time to peel the onion.

AUGEAN STABLES

While the fundamental principles upon which the common property in game rest have undergone no change, the development of free institutions had led to the recognition of the fact that the power or control lodged in the state, resulting from this common ownership, is to be exercised, like all other powers of government, as a trust for the benefit of the people, and not as a prerogative for the advantage of the government as distinct from the people, or for the benefit of private individuals as distinguished from the public good. Therefore, for the purpose of exercising this power, the state, as held by this court in *Martin v. Waddell*, 16 Pet. 410, represents its people, and the ownership is that of the people in their united sovereignty. The common ownership, and its resulting responsibility in the state, is thus stated in a well-considered opinion of the supreme court of California:

‘The wild game within a state belongs to the people in their collective sovereign capacity. It is not the subject of private ownership, except in so far as the people may elect to make it so; and they may, if they see fit, absolutely prohibit the taking of it, or traffic and commerce in it, if it is deemed necessary for the protection or preservation of the public good.’ Ex parte Maier, ubi supra.

The same view has been expressed by the supreme court of Minnesota, as follows:

‘We take it to be the correct doctrine in this country that the ownership of wild animals, so far as they are capable of ownership, is in the state, not as a proprietor, but in its sovereign capacity, as the representative and for the benefit of all its people in common.’ State v. Rodman, supra.

Geer v. Connecticut
United States of America
16 S.Ct. 600 (1896) (parts overruled by
Hughes v. Oklahoma, 441 U.S. 322)

MAY 24, 1926. The old “game refuge bill” came up in the Senate; and Senators William H. King, of Utah, and C. C. Dill, of Washington, vigorously opposed it in devastating speeches. The motives of the bill and its professional backers were attacked, and many secret records were exposed. The desires and efforts of the American Game Protective Association to promote the business interests and protect the profits of the manufacturers of arms and ammunition by working for the bill were revealed by the reading and printing of correspondence. The bill was so badly damaged that it quickly disappeared from public view.

- William Temple Hornaday, *Thirty Years War for Wildlife*, 1931 (27)

. . . as a trust for the benefit of the people, and not as a prerogative for the advantage of the government as distinct from the people, or for the benefit of private individuals as distinguished from the public good...

On its face, and at the very least, what is occurring within the Association of Fish and Wildlife Agencies is a violation of the public trust.

In 1842 the Supreme Court ruled that wildlife was to be held in trust for all citizens.

In 1926, the role and self-interest of firearms and ammunition manufacturers and commercial imperatives in wildlife policy was a source of scandal. The American Game Protective and Propagation Association has changed its name. It is now the Wildlife Management Institute, and it, along with other, redundant, trade association cohorts, boasts that it is running U.S. wildlife policy.

By 2011, state wildlife divisions are indistinguishable from the businesses they regulate. Under anachronistic laws, the “industry/agency” partnership, left unchecked, has metastasized. It is a closed syndicate, a private franchise operated for the advantage and profit of private individuals and corporations. And it is pay to play: those who do not subscribe to the orthodoxy are not permitted access. The recent inclusion of certain cooperative conservation groups has, especially on the black bear, purchased silence. The casualty is the public trust, and our wildlife. The corruption is institutional and systemic.

The New York Times has editorialized:

The national agency charged with protecting public lands and wildlife is riddled with incompetence and corruption, captive to industries it is supposed to regulate and far more interested in exploiting public resources than conserving them. . . But the department’s failings go beyond that to its coziness with the industries it is sworn to regulate, its reckless assault on the country’s natural resources and its abuse of science. (“Fixing Interior,” Dec. 16, 2008)

State wildlife departments, virtually merged with industry, receive even less scrutiny than Interior.

The New Jersey Division of Fish and Wildlife technically “serves” the New Jersey Fish and Game Council. Of the council’s 11 members, 6 are nominated by the New Jersey State Federation of Sportsmen’s Clubs. The council is autonomous, proposing and voting on its own regulations. The council, or hunting club, nominates its own regulator, the director of the Division. In turn, the Division is joined with trade associations and promotes the commercial agenda. If all of the above is not a conflict of interest, then nothing is.

Our courts generally allow state and federal agencies the benefit of the doubt. Yet judges who would not defer to SigArms Corporation, or ATK Ammunition Systems, routinely defer to industry's stand-ins. The trade itself asserts that it controls policy, but "stays away from the limelight."

If we are a nation that can be manipulated by game managers, publicists, and gun dealers, perhaps we have the government we deserve. Our wildlife, however, is a national treasure; and the looters hold the keys.

Politicians must summon the will to weather the bluster of a daily shrinking minority that, as actual numbers plummet, has gained disproportionate and increased power through national trade associations and complicit government agencies. Outdated laws that disenfranchise the absolute majority must be changed. Finally, it appears that the Association of Fish and Wildlife Agencies should be held accountable, preferably in federal court.

SOURCES

- [1] The National Shooting Sports Foundation, Inc., *Access for Today, Opportunities for Tomorrow*, Undated.
- [2] Association of Fish and Wildlife Agencies, "Industry/Agency Partnership," 17 Nov 2011.
- [3] Safari Club International, "SCI's Litigation Department," 2011.
- [4] "Hunting 2007: Decline in Hunter Numbers Worries Wildlife Agencies," Associated Press, 25 Sept 2007.
- [5] "State launches a hunt for youthful hunters," 25 Mar 2003. "Doing so would help the division reverse the shocking decline in the number of people that hunt in the state. New Jersey hunters are dwindling quickly. In 1991, the state had 88,263 people with resident hunting licenses. In 1992, the figure was 84,261. By 1996, there were 70,058 and by 1999 the state sold only 59,707 licenses. For the entire decade, there was only one year when the trend was reversed: In 2000, 60,085 people signed up to be hunters. But the slide resumed in 2001, with 56,574 licenses sold and officials are estimating a figure of about 50,000 for 2002. "It's approximately a 43 percent decrease from 1991 to 2002," Di Mattia {DEP Business Administrator} lamented." "Fishing shows a 41 percent decrease over the same period." The New Jersey Outdoor Alliance claims to represent "nearly one million voters."
- [6] T.L. Brown, N.A. Connelly, and D.J. Decker. *Participation in and Orientation of Wildlife Professionals toward Consumptive Wildlife Use: A Resurvey*, 2006, HDRU Publ. 06-1. Dept. of Nat. Resource, N.Y.S. Coll. of Ag. and Life Sci., Cornell Univ., Ithaca, NY. 24 p. ([Click here for PDF file.](#))
- [7] Ibid.
- [8] "Trends in Consumptive Recreation and the Wildlife Profession," *Wildlife Society Bulletin* 28 (4), 2000.
- [9] "Proposed Nevada bear hunt draws controversy," *The Union.com*, 17 Nov 2011.
- [10] "The Black Bear population is healthy and growing in eastern Kentucky, says the state's top bear biologist," *Kentucky Angling News Magazine*, 24 Jul 2011.
- [11] Stephen Stringham, "Reducing Nuisance Activity by Black Bears," WildWatch. For BEAR Group. Undated.
- [12] Anchorage Residents' Opinions on Bear and Moose Population Levels and Management Strategies. Responsive Management for Alaska Department of Fish and Game. 2110 [sic]. 2010.
- [13] Ibid.
- [14] Responsive Management, "West Virginia Residents' Opinions on Black Bear and Black Bear Hunting," 2006.
- [15] J.P. Beckman, L. Karasin, C Costello, S Matthews and Z Smith (2008) *Coexisting with Black Bears: Perspectives from Four Case Studies Across North America*, WCS Working Paper No. 33. New York: Beckman et al. 53
- [16] Ibid.
- [17] Responsive Management, *Public Attitudes Toward Black Bear Management in Maryland*, conducted for Maryland Department of Natural Resources, 2004. 63.
- [18] David S. Maeh, "Black Bear Ecology and Colonization of Eastern Kentucky," Vol 2 (4), Undated.
- [19] Arizona Game and Fish Department, "[Big Game Hunter Survey: Arizonans look forward to more opportunities to hunt](#)," 13 Jan 2007.
- [20] "Nevada Not Alone in Bear Hunt Controversy," *RGJ.com*, 3 Nov 2011.
- [21] Maryland Department of Natural Resources, "DNR Closes Bear Hunting Season Due To Overwhelming First-Day Success," Maryland Department of Natural Resources. Undated.
- [22] "Lake Tahoe Residents See to Halt Bear Hunt in Court," *Los Angeles Times*, 12 June 2011.
- [23] "Proposed Nevada Bear Hunt Draws Controversy," *Union News Service*, 28 Nov 2010.
- [24] Ibid.
- [25] *Los Angeles Times*, 12 June 2011.
- [26] "Nevada's first bear hunt approved," *Las Vegas Review-Journal*, 4 Feb 2011.
- [27] "As Bears Multiply, Human Clashes Rise," *Wall Street Journal*, 21 Nov 2011.
- [28] "Urban Bears Live Fast, Die Young," Wildlife Conservation International, *ScienceDaily*, 30 Sept 2008.
- [29] "State Bear Hunts Trigger Emotions, Controversy," *USA Today*, 14 Nov 2011.
- [30] Maryland Department of Natural Resources, "Bear Hunters' Guide to Hunting Black Bears in Maryland," 2011.
- [31] Maryland Department of Natural Resources, "Summary of 2009 Maryland Black Bear Mortality, Nuisance, and Sightings Reports," 2009.
- [32] Ontario Ministry of Natural Resources, Press Release, 17 Dec 2003.
- [33] Responsive Management, "Public Attitudes Toward Black Bear Management in Maryland," Maryland Department of Natural Resources. 2004. iv.
- [34] Responsive Management, "Public Attitudes Toward Black Bear Management in Maryland," Maryland Department of Natural Resources. 2004. 40.
- [35] Ibid.
- [36] Responsive Management, "PUBLIC ATTITUDES TOWARD BLACK BEAR MANAGEMENT IN MARYLAND," Conducted for the Maryland Department of Natural Resources. 2004.
- [37] Kentucky Department of Fish and Wildlife Resources, "Black Bear Resource Selection in Eastern Kentucky," *Annual Research Highlights, 2007*. Vol 1 July 2008. 12.

- [38] Aimee D. Heald, "Rising Black Bear Population in Kentucky a good sign," University of Kentucky, College of Agriculture. 2003.
- [39] Steven Dobby et al., "Estimating Bear Population Size without Harvest Data: Case Studies and Commentary," Kentucky Department of Wildlife Resources.
- [40] Kentucky Department of Fish and Wildlife Resources, "Kentucky Black Bear Hunt Approved for the 2009 Season," 16 Jan 2009.
- [41] "Kentucky Bear Population Healthy, Growing," *Kentucky Angling News Magazine*, 24 June 2011.
- [42] "Oklahoma black bear population increasing," *Southwest Farm Press*, 4 Nov 2008.
- [43] 40/29 News, "Oklahoma Hosts First Bear Hunt," 2 Oct 2009.
- [44] Ibid.
- [45] Ibid.
- [46] Ibid.
- [47] Patricia McConnell et al. "Black Bear Management Plan," Division of Fish and Wildlife. 1997.
- [48] Robert Lund et al. "Restoration of the Black Bear to the New Jersey Pine Barrens - A Discussion of the Proposal and a Discussion of the Impacts," Division of Fish, Game and Wildlife, 1981.
- [49] Northwest Territories Wildlife Division, "Black Bear Reproduction," 13 Sept 2005.
- [50] New Jersey Fish and Game Council, "New Jersey Fish and Game Council Comprehensive Black Bear Management Plan 2004," 14 Nov 2005. 49.
- [51] Responsive Management, "West Virginia Residents' Opinions on Black Bears and Black Bear Hunting."
- [52] New Jersey Independent Bear Panel Report 5 Mar 2003. On February 4, 2003, Commissioner Bradley M. Campbell named scientists, governmental representatives and interested persons to serve on an independent bear panel. The purpose of the panel was to review the population estimates of the Division of Fish and Wildlife, and if possible, to also make recommendations on management issues based upon their review of the estimates. The panel did not focus on hunting or the hunting debate.
- [53] Steve Searles to Bear Education And Resource Group, personal communication, 2000, re-confirmed 18 Nov 2011.
- [54] Responsive Management. BEARS AND BLACK BEAR HUNTING. Conducted for the West Virginia Division of Natural Resources by Responsive Management. 2006. *iii*.
- [55] Responsive Management. "THE NORTH AMERICAN MODEL OF WILDLIFE CONSERVATION: AFFIRMING THE ROLE, STRENGTH AND RELEVANCE OF HUNTING IN THE 21st CENTURY Public Opinion on and Attitudes Toward Hunting, undated. 14-15.
- [56] Maryland Department of Natural Resources. Bear Hunters' Guide to Hunting Black Bears in Maryland. 2011.
- [57] State of New Jersey Department of Environmental Protection. "News Release: Week-long Bear Hunting Season Begins in Northwestern New Jersey," 6 Dec 2010.
- [58] Responsive Management/National Shooting Sports Foundation. *The Future of Hunting and the Shooting Sports*. Produced for U.S. Fish and Wildlife Service Under Grant, 2008.
- [59] Responsive Management/National Shooting Sports Foundation, "The Future of Hunting and Agreement CT-M-6-0," Harrisonburg, VA. 2008.
- [60] Attitudes Toward and Awareness of Trapping Issues in Connecticut, Indiana and Wisconsin. Responsive Management 2001.
- [61] American Attitudes Toward Scientific Wildlife Management and Human Use of Fish and Wildlife: Implications for Effective public Relations and Communications Strategies. Responsive Management.
- [62] Christopher W. Ryan, et al. "West Virginia residents' attitudes and opinions toward American black bear hunting," *Ursus* 20(2):131-142 (2009)
- [63] Responsive Management. "Responsive Management Report: Securing a Future for Fish, Wildlife, and Natural Resources in the 21st Century," Spring 2005. 2.
- [64] Stephanie Kenyon et al, Bears in the Backyard, Deer in the Driveway: The Importance of Hunting and Trapping in Helping Wildlife, AFWA,U.S. Fish and Wildlife Service. Aug 1999.
- [65] Point to Point Communications, <http://www.pt2ptcom./howeare.htm> 14 Mar 2002.
- [66] Point to Point Communications, "What Our Clients Say," <http://www.pt2ptcom/whatourclientsay.htm> 2 Dec 2001.
- [67] 2005 ACI Conference. "Teaming with Wildlife Training the Messengers Workshop," Jul 12 2005, <http://wildlife.utah.gov/aci2005/tue.html> (Nov 2011).
- [68] "Bear Did Not Try to Eat A Hiker, an Official Says," New York Times, 13 Aug 2005.

WE'RE ALL GAME MANAGERS NOW

After 70 years of industry-conservationist reign, it has become unfashionable, even heresy, to raise the matter of cruelty and the love of animals. The latter will earn disdain. Game jargon and an increasingly coarse perspective is pervasive; if numbers are sufficient, we may do what we will.

Ironically, ethical concerns jibe, more than not, with good science. A refresher course:

George Bernard Shaw 1856 - 1950

We are, as a matter of fact, a cruel nation, and our habit of disguising our vices by giving polite names to the offenses we are determined to commit, does not, for my own comfort, impose on me. . . I would rather swear fifty lies than to take an animal which had licked my hand in good fellowship and torture it.

Doctor's Dilemma

Albert Schweitzer 1875 - 1965

As long as I can remember, I have suffered because of the great misery I saw in the world. . . I used to suffer particularly because the poor animals must endure so much pain and want. . . At that very moment the church bells began to sound, mingling with the songs of the birds in the sunshine. . . I threw the sling down, scaring the birds away so they were safe from my companion's sling, and fled home. And ever afterwards when the bells of holy week rang out amidst the leafless trees in the sunshine, I remember with moving gratitude how they rang into my heart at that time the commandment: Thou shalt not kill.

Memoirs of Childhood and Youth

Seneca 5 B.C. - A.D. 65

Insatiable. . . some animals it [human greed] persecutes with snares and traps, with hunting nets, with hooks, sparing no sort of toil to obtain them. . . what loss have you in losing your cruelty? There is no peace allowed to any species of being. . . we shall recover our reason only if we shall separate ourselves from the herd — the very fact of the approbation of the multitude is a proof of the unsoundness of the opinion or practice. Let us ask what is best, not what is customary. . . Let us refrain from bloodshed

Epistola

Voltaire 1694 - 1778

How pitiful, what poverty of mind, to have said that the animals are machines deprived of understanding and feeling. . . answer me, mechanist, has nature arranged all the springs of feeling in this animal *to the end that he might not feel?*

Philosophical Dictionary

Thomas Paine 1737 - 1809

Everything of persecution and revenge between man and man, and everything of cruelty to animals, is a violation of moral duty.

The Age of Reason

Abraham Lincoln 1809 - 1865

I am in favor of animal rights as well as human rights. That is the way of a whole human being.

Complete works

Pythagoras 6th Century B.C.

As long as man continues to be the ruthless destroyer of lower living beings, he will never know health or peace. For as long as men massacre animals, they will kill each other.

Ovid (Attributed)

Ashley Montagu 1905 - 1999

Western industrial man, the proponent of the most anthropocentric religion the world has ever seen, has become a creature who is literally alienated from the rest of nature. . . the indifference, callousness and contempt that so many people exhibit toward animals is evil first because it results in great suffering in animals, and second because it results in an incalculably great impoverishment of human spirit.

Of Man, Animals and Morals

Michel Eyquem de Montaigne 1533 - 1592

Presumption is our natural and original disease. The most calamitous and fragile of all creatures is man, and yet the most arrogant. It is through the vanity of this same imagination that he picks himself out and separates himself from the crowd of other creatures, curtails the just shares of other animals his brethren and companions, and assigns to them only such portions of faculties and forces as seems to him good. How does he know, by the effort of his intelligence, the interior and secret movements and impulses of other animals. By what comparison between them and us does he infer the stupidity which he attributes to them?

The Essays (Apology)

Albert Einstein 1879-1955

He experiences himself... as something separate from the rest . . . This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty. . .

NY Post, Nov. 28, 1972

George Eliot 1819-1880

Women should be protected from anyone's exercise of unrighteous power . . . but then, so should every other living creature.

From a letter

Plutarch c. A.D. 46 - c. 120

The obligations of law and equity reach only to mankind, but kindness and benevolence should be extended to the creatures of every species, and these will flow from the breast of a true man... does it not shame you to mingle murder and blood with her beneficent fruits?

Moralia

Mark Twain 1835 - 1910

The fact that man knows right from wrong proves his *intellectual* superiority to the other creatures; but the fact that he can *do* wrong proves his *moral* inferiority to any creature that cannot.

What is Man?

Alexander Pope 1688 - 1744

Has God, thy fool, worked solely for thy good?

They joy, thy pastime, thy attire, they food?

Who for thy table feeds the wanton fawn,

For him as kindly spread the flower'y lawn:

. . . And just of short of reason he must fall,

Who thinks all made for one, not one for all

Essay on Man

Leonardo Da Vinci 1452-1519

Truly man is the king of beasts, for his brutality exceeds theirs... (Merjowksy) . . . I have from an early age abjured the use of meat, and the time will come when men such as I will look upon the murder of animals as they now look upon the murder of men. (Notes).

Nothing will be left.

Nothing in the air, nothing under the earth, nothing in the waters.

All will be hunted down. all exterminated.

(Ibid).

Thomas A. Edison 1847 - 1931

Non-violence leads to the highest ethics, which is the goal of all evolution. Until we stop harming all other living beings, we are savages.

Harper's Magazine 1890

Harriet Beecher Stowe 1811-1896

I and my daughters and my husband have been regarded as almost fanatical in our care of animals wherever we have been, and in Florida we have seen much to affect us everywhere maiming, wounding and killing poor birds and beasts that they do not even stop to pick up, and shoot in mere wantonness. . . I for my part am ready to do anything that can benefit the cause... (Letter to Henry Bergh, Nov. 6, 1877).

It's a matter of taking the side of the weak against the strong, something the best people have always done.

The Minister's Wooing

Joseph Wood Krutch 1893 - 1970

But one bat in a swimming pool is not the same thing as two or three hundred thousand at Carlsbad. Because there is only one of him and one of me, some sort of relationship, impossible in the presence of myriads, springs up between us. I no longer take toward him that attitude of nature or dictator. I become a man again, aware of feelings which are commonly called humane, but for which I prefer a stronger word, human.

The Best Nature Writing of Joseph
Wood Krutch

Laurence Stern 1713-1768

“I’ll not hurt thee,” says Uncle Toby, rising with the fly in his hand. “Go,” he says, opening the window to let it escape. “Why should I hurt thee? This world is surely big enough to hold both thee and me.”

Tristram Shandy

Henry D. Thoreau 1870 - 1862

No humane being, past the thoughtless age of boyhood, will wantonly murder any creature which holds its life by the same tenure that he does.

Walden

Leo Tolstoy 1828-1910

Not long ago, I also had a talk with a retired soldier, a butcher, and he too was surprised by my assertion that it was a pity to kill, and said the usual things about its being ordained; but afterwards, he agreed with me: “Especially when they are quiet, tame cattle. They come, poor things, trusting you. It is very pitiful.”

This is dreadful! Not the suffering and death of the animals, but that man suppresses in himself unnecessarily, the highest spiritual capacity — that of sympathy and pity toward living creatures like himself — and by violating his own feelings becomes cruel. And how deeply seated in the human heart is the injunction not to take life! But by the assertion that God ordained the slaughter of animals, and above all as a result of habit, people entirely lose their natural feeling.

The First Step

Charles Darwin 1809 - 1882

We have seen that the senses and intuitions, the various emotions and faculties, such as love, memory, attention and curiosity, imitation, reason, etc., of which man boasts, may be found, in an incipient or even sometimes in a well-developed condition, in the lower animals . . . The love for all living creatures is the most noble attribute of man.

Descent of Man

John Locke 1632 - 1704

Children should from the beginning be brought up in an abhorrence of killing and tormenting living beings. . . And indeed, I think that people from their cradles should be tender to all sensible creatures.

Thoughts on Education

John Galsworthy 1867 - 1933

You are not living in a world of your own. Everything you say and do and think has its effect on everybody around you. . . How do you imagine it ever came about that bears and bulls and badgers are no longer baited, cocks no longer openly encouraged to tear each other to pieces; donkeys no longer beaten to a pulp. When a thing exists which you abhor, I wish you would remember a little whether in letting it strictly alone you are minding your own business on principle, or simply because it is comfortable to do. (Much Cry — Little Wool)... The moment it comes to trying to save beasts' suffering at the expense of a definite class of men or women, the reformer is right up against it. . . The whole movement toward decent treatment of animals is a terribly slow one and [that] its only chance of real progress is gradual educational infection.

A Sheaf

William Shakespeare 1564 - 1616

Duke Senior:

Come, shall we go and kill us venison?

And yet it irks me, the poor dappled fools,

Being native burghers to this desert city,

Have their round haunches gor'd

First Lord:

Indeed, my lord;

The melancholy Jaques grieves at that;

And, in that kind, swears you do more usurp

Than doth your brother that hath banish'd you.

To-day my Lord of Amiens and myself

did steal behind him as he lay along

Under an oak whose antique root peeps out

Upon the brook that brawls along this wood;

To the which place a poor sequester'd stag,

That from the hunters' aim had ta'en a hurt,

Did come to languish; and indeed, my lord,

That their discharge did stretch his leathern coat

Almost to bursting, and the big round tears,

Cours'd one another down his innocent nose

In piteous chase; and thus the hairy fool,

Much marked of the melancholy Jacques,

Stood on the extremest verge of the swift brook,

Augmenting it with tears.

As You Like It, Act 2, Scene 1

King Henry:

Thou never did'st them wrong, nor no man wrong;

And, as the butcher takes away the Calf,

And binds the wretch, and beats it when it strays.

Bearing it to the bloody slaughter-house;

Even so, remorseless, they have borne him hence;

King Henry the Sixth

Victor Hugo 1801 - 1885

For myself, I believe that pity is a law like justice, and that kindness is a duty like uprightness. That which is weak has the right to the kindness and pity of that which is strong. Animals are weak because they are less intelligent. let us therefore be kind and compassionate towards them . . . There is a whole great ethic [*toute une grande morale*] scarcely seen as yet, but which will eventually break through into the light and be the corollary and the complement to human ethics.

Alpes et Pyrenees

Emile Zola 1840 - 1902

The fate of animals is of greater importance to me than the fear of appearing ridiculous; it is indissolubly connected with the fate of men.

Correspondence

A Word About Who Pays for Conservation

Duck stamp receipts subsidized by U.S. Treasury loans have purchased about 3 percent of refuge lands, or about 5.2 million acres.

The National Wildlife Refuge System encompasses 96 million acres.

By executive order, Theodore Roosevelt established the first bird preserve, Pelican Island Migratory Bird Reservation, along the central Atlantic coast of Florida. The Fish and Wildlife Act of 1956 and the National Wildlife Refuge Administration Act empowered the U.S. Fish and Wildlife Service to acquire refuge lands. Congress also enacts legislation enabling specific refuge acquisitions and expansions. Moneys are appropriated from the Land and Water Conservation Fund (LWCF) and the Migratory Bird Conservation Fund (MBCF).

The LWCF was established by Congress in 1964 from offshore oil and gas receipts, sales of federal property, and motorboat fuel. Under LWCF, \$900 million is available each year for parkland, water resources, open space, and state and local park projects. Priorities are migratory birds, fish, endangered species, interpretation and recreation (including hunting), and refuges. LWCF appropriations also fund grants-in-aid to states for acquisition and development of recreation (including hunting) areas. The fund supports National Park Service, Bureau of Land Management and the Forest Service land buys. Unspent funds are carried over to the next fiscal year.

Receipts from ducks stamps, an advance loan of \$197 from the U.S. Treasury, and \$153 million collected from refuge entrance fees and import duties on firearms and ammunition sustain the MBCF. As noted in a USFWS refuge acquisition breakdown, “Migratory Bird Hunting and Conservation Stamps (Duck Stamps) have brought in about \$477 million since 1934.” Ten percent of duck stamps are bought by art dealers, hobbyists and stamp collectors, and that percentage is rising. Collectively, MBCF funds have purchased about 2.7 million acres, or about 3 percent of Refuge System lands. According to the Service, “An additional 1.4 million acres (about 1.5 percent of Refuge System lands) have been purchased using about \$1 billion from the Land and Water Conservation Fund. Most refuge lands (almost 90 percent) have been withdrawn from the public domain.”^[1] (Editor’s Note: As of 2007.)

Purchases attributed to hunters include Treasury loans, general public access fees, and acreage otherwise acquired.

Congress annually appropriates about \$29 million for refuge roads and trails; \$1 million for hunter access signs near refuges, and more.^[2]

The public pays, and has paid, the lion’s share for wildlife and has

heavily subsidized hunting. The president’s 2007 budget proposal for the U.S. Fish and Wildlife Service was \$2.1 billion.^[3] The budget included \$808.1 million available under permanent appropriations, “most of which will be provided directly to States for fish and wildlife restoration and conservation,” including but far exceeding Pittman-Robertson excise funds on guns, ammunition, and equipment, and \$333.2 million for a spectrum of conservation programs.^[4]

In the states, hunter fees purchased public shooting grounds, now called wildlife management areas, prior to the 1960s. The advent of Green Acres, or open space bond issues, “enabled the general public to participate in the development of the system.”^[5] Since then, Green Acres acquires shooting grounds in New Jersey, purchasing more than 60 percent of the system’s current 305,000 acres (44 percent of the state’s public open space). Boat ramps, dams and parking lots are paid for by Green Acres, General Fund Capital appropriations, and Pittman Robertson excise tax revenues.

Hunter fees primarily pay for the administration of hunting programs and shooting-related public relations, including a wide spectrum of poll-tests, surveys, communications guides, and for the construction of deer hunting zones and related surveys. In New Jersey license fees fund the salaries and benefits of Division of Fish and Wildlife employees to administer, support, and actively promote hunting programs, including the pen-raising of 55,000 pheasants for shooting. Gunning is not required to preserve habitat. Non-hunting Americans have proved extremely generous in public support for open space and wildlife habitat and do in fact foot most of the bill. Under State Wildlife Grants and other funding mechanisms, the general public will pay even more in the years to come, yet remains effectively barred from policy. Those powers are held, lock, stock and barrel, by the gun-gun-game lobby and cooperating conservation partners.

[1] U.S. Fish and Wildlife Service, “How long has the Federal Government been setting aside lands for wildlife?” [NWRS FAQs - Land Acquisition www.fws.gov/refuges/faqs/acquisition.html](http://www.fws.gov/refuges/faqs/acquisition.html) (6 June 2006).

[2] Delaware Department of Natural Resources and Environmental Control, “Unprecedented Funding in Federal Transportation Bill,” Vol. 43, 19 Aug 2005.

[3] U.S. Fish and Wildlife Service. “News Release: President Seeks More than \$2 Billion for U.S. Fish and Wildlife Service in 2007 Budget,” 6 Feb 2006.

[4] U.S. Fish and Wildlife Service, FY 2007 DOI Highlights book - FWS Section.

[5] New Jersey Division of Fish and Wildlife, “The Wildlife Management Area System,” 2006.